WHAT IS CLAIMED IS:

1. A targeted gene delivery method that comprises bringing bispecific ligands into contact with (a) bacterially derived minicells that contain a therapeutic nucleic acid sequence and (b) non-phagocytic mammalian cells, such that (i) said bispecific ligands cause said minicells to bind to said mammalian cells and (ii) said minicells are engulfed by said mammalian cells, which produce an expression product of said therapeutic nucleic acid sequence.

2. A method according to claim 1, wherein said bispecific ligand comprises polypeptide or carbohydrate.

3. A method according to claim 1, wherein said bispecific ligand comprises a first arm that carries specificity for a bacterially derived minicell surface structure and a second arm that carries specificity for a non-phagocytic mammalian cell surface receptor.

4. A method according to claim 3, wherein said first arm and said second arm are monospecific.

5. A method according to claim 3, wherein said first arm and said second arm are multivalent.

6. A method according to claim 3, wherein said minicell surface structure is an O-polysaccharide component of a lipopolysaccharide on said minicell surface.

7. A method according to claim 3, wherein said minicell surface structure is a member of the group consisting of outer membrane proteins, pilli, fimbrae, flagella, and cell-surface exposed carbohydrates.

8. A method according to claim 3, wherein said mammalian cell surface receptor is capable of activating receptor-mediated endocytosis of said minicell.

9. A method according to claim 1, wherein said bispecific ligand comprises an antibody or antibody fragment.

10. A method according to claim 1, wherein said bispecific ligand comprises a humanized antibody.

11. A method according to claim 1, wherein said minicell comprises an intact cell wall.

12. A method according to claim 1, wherein said therapeutic nucleic acid sequence encodes a suicide gene.

13. A method according to claim 1, wherein said therapeutic nucleic acid encodes a normal counterpart of a gene that expresses a protein that functions abnormally or is present in abnormal levels in said mammalian cells.

14. A method according to claim 1, wherein said mammalian cells are *in vitro*.

15. A method according to claim 1, wherein said mammalian cells are *in vivo*.

16. A method according to claim 1, wherein said therapeutic nucleic acid is contained on a plasmid comprised of multiple nucleic acid sequences.

17. A method according to claim 16, wherein said plasmid comprises a regulatory element.

18. A method according to claim 16, wherein said plasmid comprises a reporter element

19. A composition comprising (i) a bacterially derived minicell that contains a therapeutic nucleic acid molecule and (ii) a bispecific ligand that is capable of binding to a surface component of said minicell and to a surface component of a non-phagocytic mammalian cell.

20. The composition of claim 19, wherein said bispecific ligand comprises polypeptide or carbohydrate.

21. The composition of claim 19, wherein said bispecific ligand comprises a first arm that carries specificity for a bacterially derived minicell surface structure and a second arm that carries specificity for a non-phagocytic mammalian cell surface receptor.

22. The composition of claim 21, wherein said first arm and said second arm are monospecific.

23. The composition of claim 21, wherein said first arm and said second arm are multivalent.

24. The composition of claim 21, wherein said minicell surface structure is an O-polysaccharide component of a lipopolysaccharide on said minicell surface.

25. The method of claim 21, wherein said minicell surface structure is a member of the group consisting of outer membrane proteins, pilli, fimbrae, flagella, and cell-surface exposed carbohydrates.

26. The composition of claim 21, wherein said mammalian cell surface receptor is capable of activating receptor-mediated endocytosis of said minicell.

27. The composition of claim 19, wherein said bispecific ligand comprises an antibody or antibody fragment.

28. The composition of claim 19, wherein said bispecific ligand comprises a humanized antibody.

29. The composition of claim 19, wherein said minicell comprises an intact cell wall.

30. The composition of claim 19, wherein said therapeutic nucleic acid sequence encodes a suicide gene.

31. The composition of claim 19, wherein said therapeutic nucleic acid encodes a normal counterpart of a gene that expresses a protein that functions abnormally or is present in abnormal levels in said mammalian cell.

32. The composition of claim 19, wherein said therapeutic nucleic acid is contained on a plasmid comprised of multiple nucleic acid sequences.

33. The composition of claim 32, wherein said plasmid comprises a regulatory element.

34. The composition of claim 32, wherein said plasmid comprises a reporter element.

35. Use of bacterially derived intact minicells and bispecific ligands in the preparation of a medicament, said minicells containing a therapeutic nucleic acid molecule and said bispecific ligands being capable of binding to said minicells and to target non-phagocytic mammalian cells, for use in a method of treating a disease or modifying a trait by administration of said medicament to a cell, tissue, or organ.